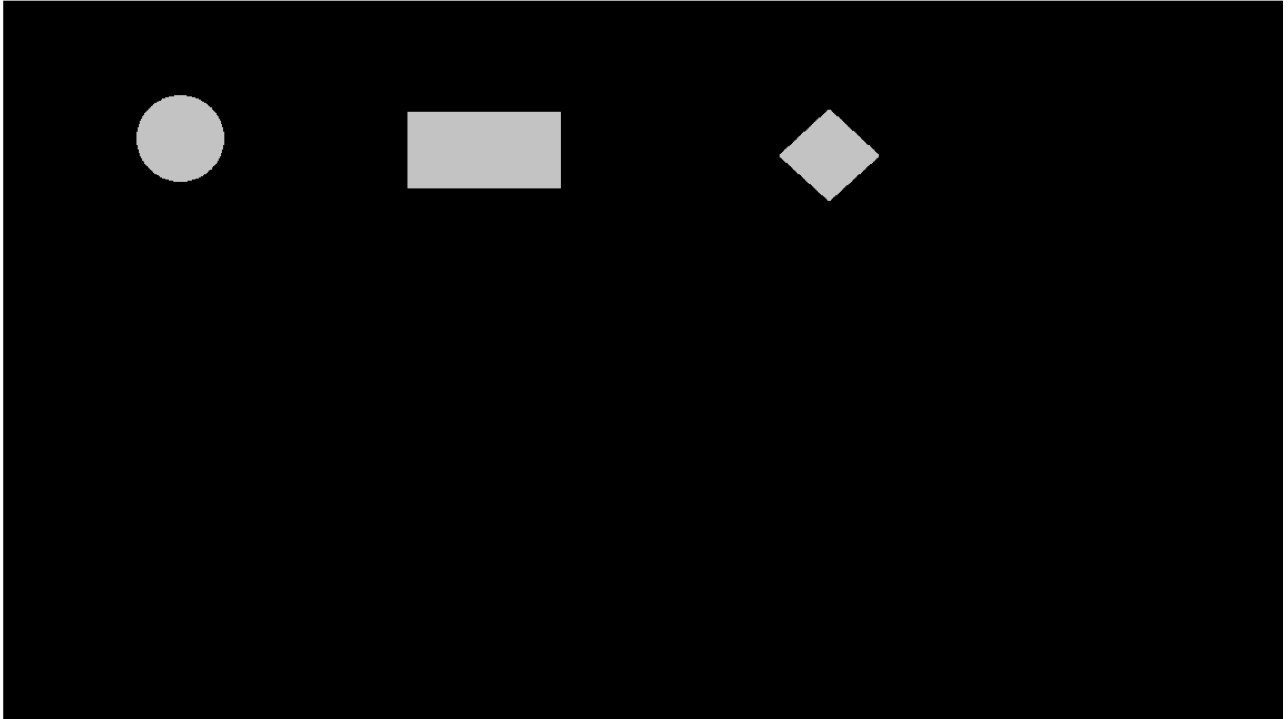
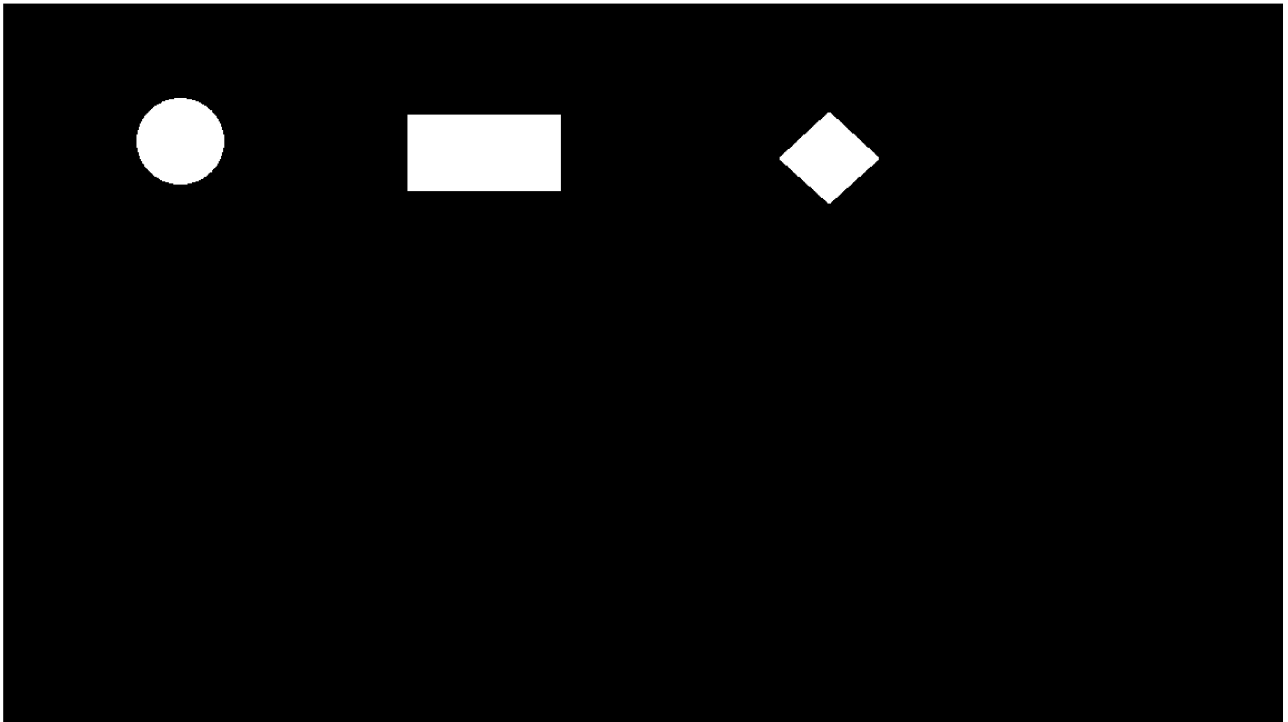


```
% Ex1
clear variables

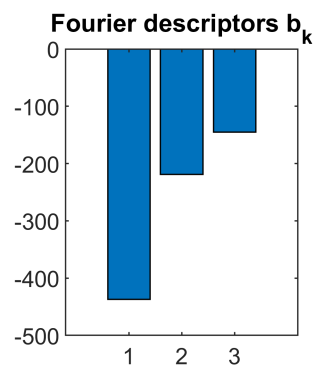
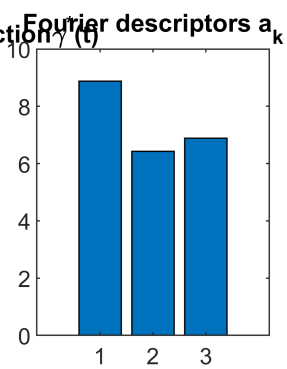
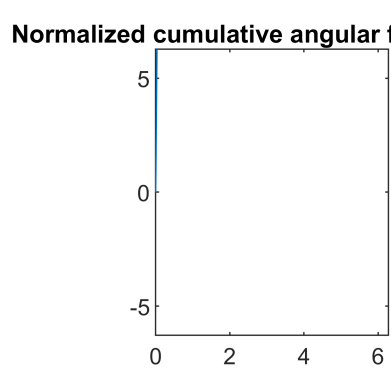
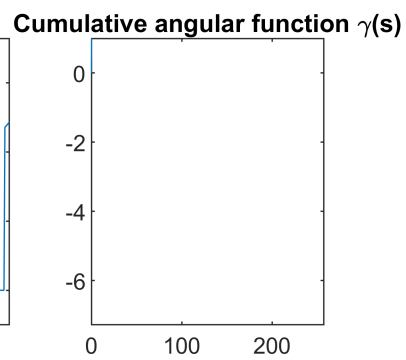
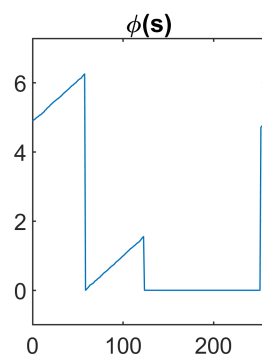
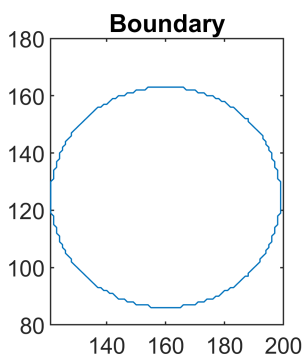
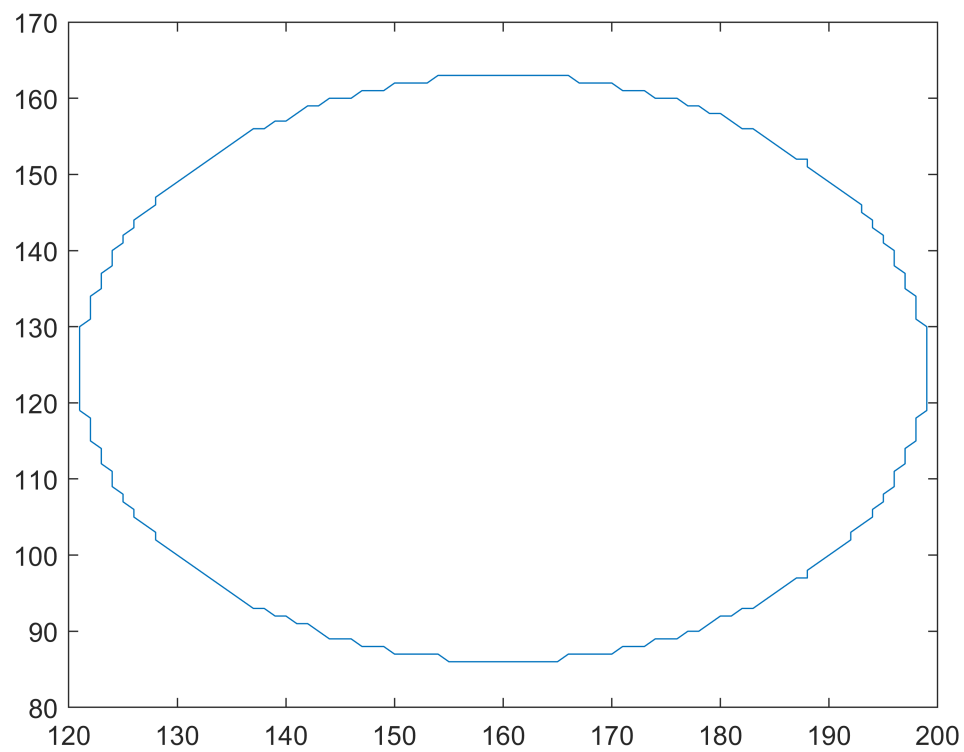
im = imread('Objects.png');
imshow(im)
```

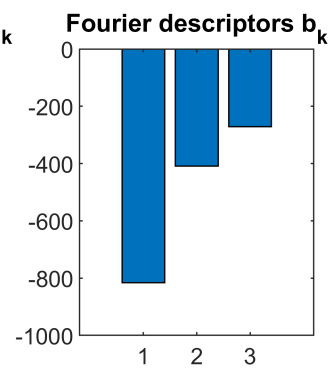
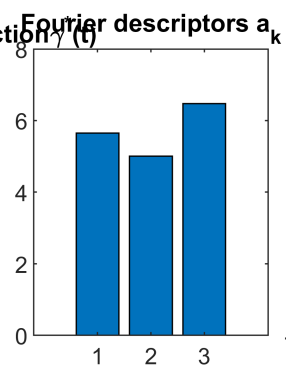
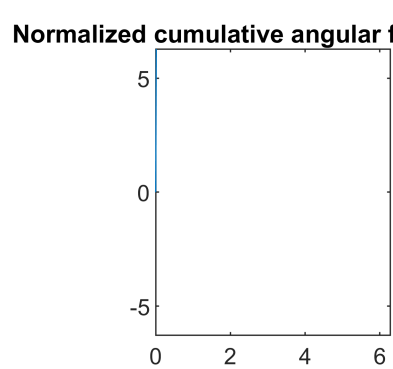
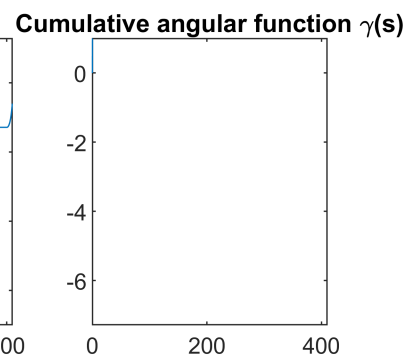
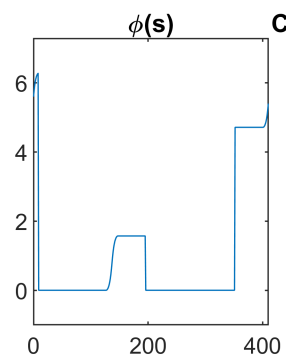
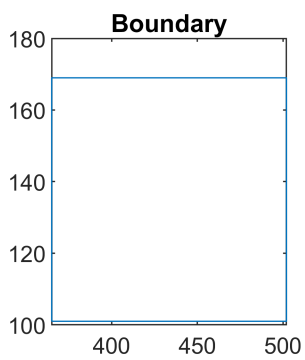
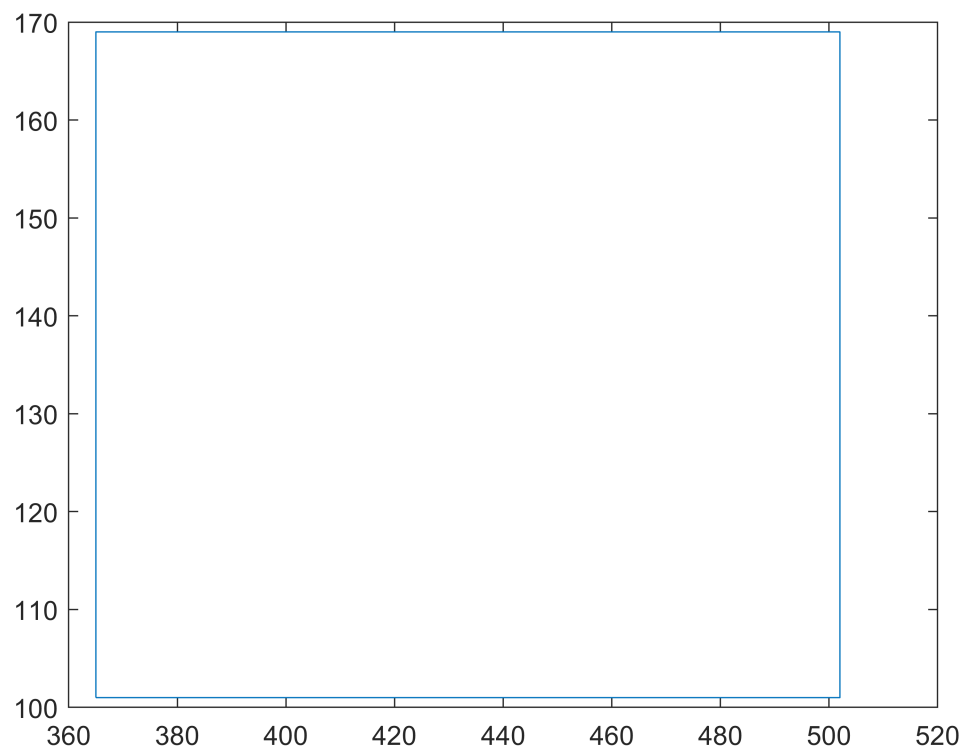


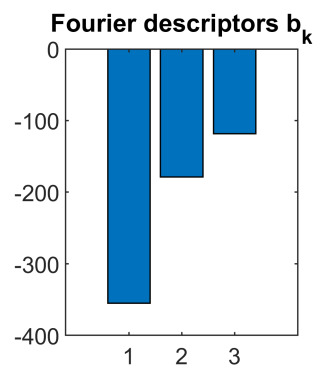
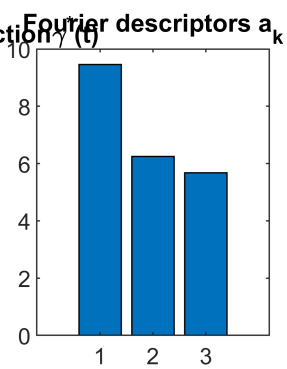
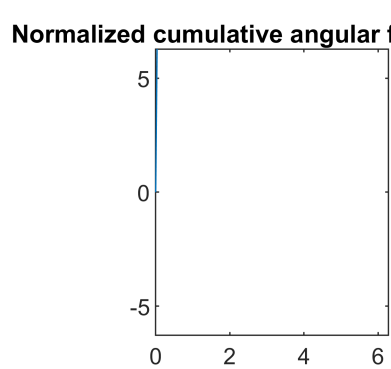
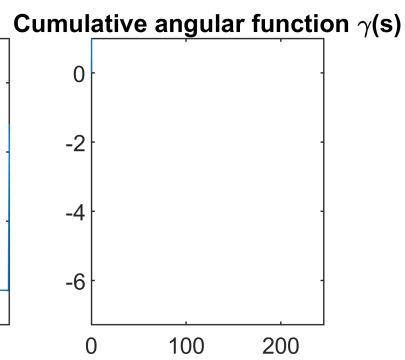
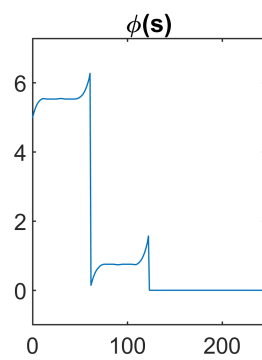
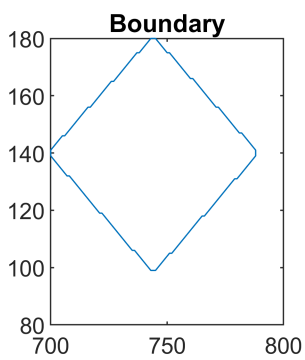
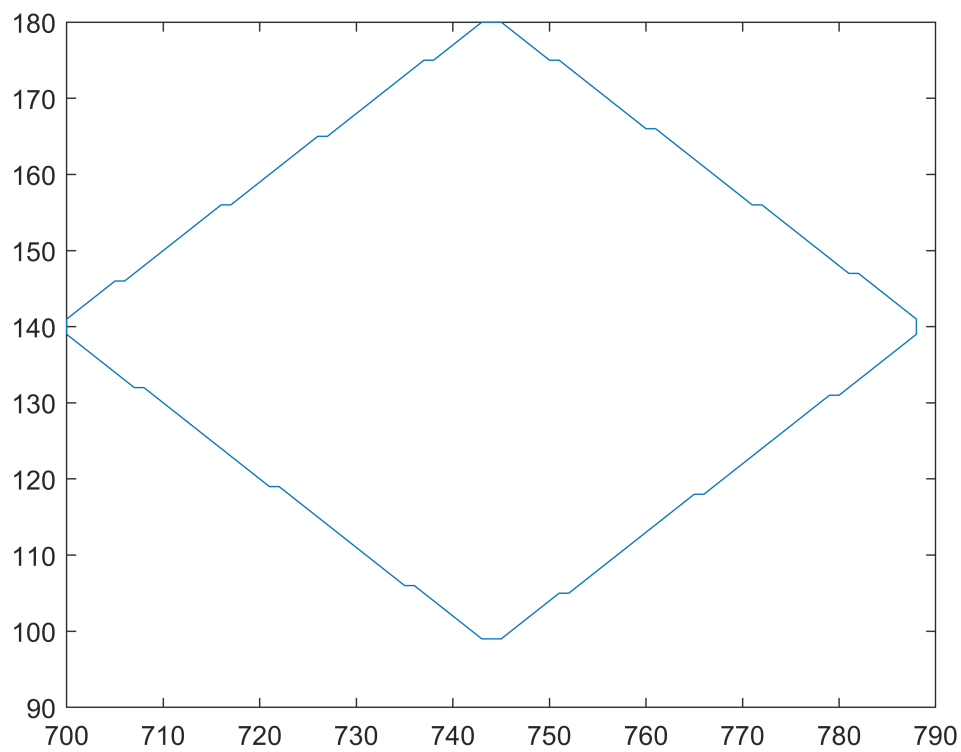
```
if(~islogical(im))
if(ndims(im) > 2), im = rgb2gray(im); end
level = graythresh(im); BW = im2bw(im,level);
else
BW = im;
end
figure , imshow(BW)
```



```
N = 10;  
[B,L,N] = bwboundaries(BW,'noholes');  
for k = 1:N  
    X = B{k}(:,2);  
    Y = B{k}(:,1);  
    contur = [X'; Y'];  
    figure, plot(X, Y);  
    angularFunctionDescriptors(contur, N);  
end
```







% Observation: No disturbances occur for higher values of N